



SOLID WASTE 101

ADEC Solid Waste Program





When Not Asking a Question:

- Mute your phone
- Mute your computer microphone
- Always:
- Be respectful and considerate
- Ask questions as they come up!



Solid Waste Technical Definition

"Solid Waste" means garbage, refuse, abandoned, or other discarded solid or semi-solid material, regardless of whether subject to decomposition, and originating from any source.
AS 46.03.900

What do we look for in a landfill?



- Adequate compaction and cover
- Presence of leachate or waste in contact with water
- Distressed vegetation
- Electronic waste
- Animal carcasses
- Household hazardous waste

Overview



Compaction and Cover

Compaction

- More frequently = More effective compaction
- Additional passes with equipment = More compaction

Cover

- Reduces infiltration of water
- Reduces the attraction of wildlife and other vectors
- Reduces windblown litter
- More sanitary



Before....



After



Same Corner



Compaction saves space in the landfill.

Example:

A full fish tote of aluminium cans will compact down to about a 4 inch thick square.

Compaction



There are 4 fish totes of cans in this stack!

Why Compact?

- Waste utilizes space rather than air
- Less air space = longer landfill life
- Smaller surface area absorbs less water
- Less infiltration of water = less leachate





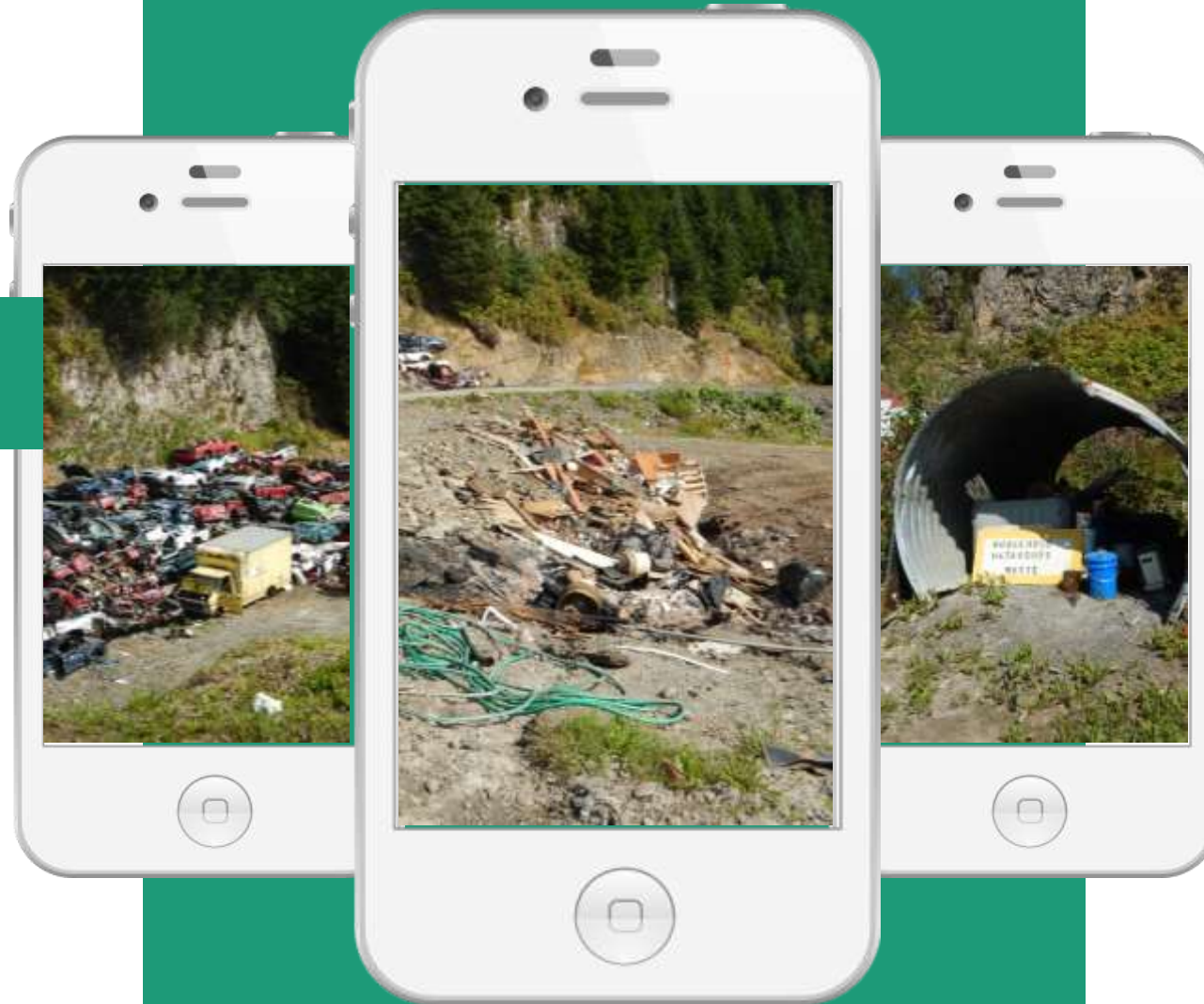
Why cover waste?

- Reduces contact with water
- Reduces leachate
- Helps compact waste
- Closes landfill area

- Looks better
- Reduces odor
- Reduces windblown litter
- Reduces wildlife attraction
- Reduces disease vectoring



Trivia!



What causes leachate at the landfill?





Answer:

Waste that sits in water causes leachate.
This includes seasonal ponding. It just
gets more potent with time!



Waste in contact with water makes leachate

Formed when water comes into contact with solid waste.

Think landfill coffee!

Technical Definition: Liquid that has passed through or emerged from solid waste and contains soluble, suspended, or miscible materials removed from the wastes.

Can contain: acids, aldehydes, sulfate, chloride, iron, aluminum, zinc, ammonia, lead, nickel, copper, mercury, dioxins, PCBs, bacteria, fungi.





Leachate often has an orange color
Can have a rainbow sheen
Contaminates get more potent over
time

Leachate Staining



How was this fixed?

Consolidated waste

Filled in low areas with dirt

Sloped the landfill so water does not pond in the facility

Added a drainage system under the sand

Leachate Controlled

Stressed vegetation from leachate seep on tundra



What about....

Stuff that's hard to dispose of?



Strange kinds of trash?



Electronics

Electronic waste can include anything with a power cord

Wiring and motherboards are another tell tale sign of electronic waste



Batteries & Ballasts





Animal Carcasses

- Need a separate disposal area
- Sprinkle hydrated lime over carcass at time of disposal
- Cover with 6 inches of soil

It is perfectly acceptable to dispose of subsistence wastes in a traditional way. Landfill disposal is not mandatory.

Hard to dispose of....

Your landfill *can't* accept:

Hazardous Waste

Untreated Medical Waste

Waste containing Polychlorinated Biphenyls (PCBs)



Trivia



True or False?

Your landfill is required to accept any and all waste streams from your community?





False!

A well operated landfill only accepts the types of waste that it can properly handle.

Can't handle junk vehicles, construction debris, white goods, polluted soil, or whatever else...it's the landfill operator's right to prohibit wastes at the facility.



Questions

